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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,431	02/08/2008	Carlos F Barbas	TSRI 1019. 1 PCT	5101
39843	7590	10/18/2010		
BELL & ASSOCIATES 58 West Portal Avenue No. 121 SAN FRANCISCO, CA 94127			EXAMINER HADDAD, MAHER M	
			ART UNIT	PAPER NUMBER
			1644	
			NOTIFICATION DATE	DELIVERY MODE
			10/18/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

abell@bell-iplaw.com  
mkaser@bell-iplaw.com  
info@bell-iplaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/581,431	<b>Applicant(s)</b> BARBAS ET AL.	
	<b>Examiner</b> Maher M. Haddad	<b>Art Unit</b> 1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-32 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

2. In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

- I. Claims 1-4, 21, 24 and 27, drawn to an isolated and purified peptide comprising from 9 to about 50 amino acid residues and having an amino acid residue sequence that is selected from the group consisting of SEQ ID Nos: 4, 5, 6, and 7, having activity that inhibits platelet aggregation and composition thereof.
- II. Claims 5-10, 15-16, 22, 23, 25-26 and 28-29, drawn to an antibody that specifically immunoreacts with integrin  $\alpha\text{IIb}\beta 3$  and comprises an amino acid residue sequence selected from the group consisting of SEQ ID Nos: 8, 25, 26, 27, 28, 29, 30, and 31, wherein the amino acid residue sequence is within a complementarity determining region of the antibody and a composition thereof.
- III. Claims 17-20, drawn to an isolated and purified polynucleotide encoding a peptide comprising from 9 to about 50 amino acid residues and having an amino acid residue sequence that is selected from the group consisting of SEQ ID Nos: 4, 5, 6, and 7 the peptide having activity that inhibits platelet aggregation, vectors, host cells, and a method of producing.
- IV. Claims 11 and 30, drawn to a method of inhibiting platelet aggregation comprising contacting platelets with an effective inhibitor amount of a peptide selected from the group consisting of SEQ ID Nos: 4, 5, 6, and 7.
- V. Claims 12, 14 and 31-32, drawn to a method of inhibiting platelet aggregation comprising contacting platelets with an effective inhibitor amount of an antibody comprises an amino acid residue sequence selected from the group consisting of SEQ ID Nos: 8, 25, 26, 27, 28, 29, 30, and 31.
- VI. Claim 13, drawn to a method of inhibiting binding of fibrinogen to platelets comprising contacting the platelets with an effective inhibitory amount of a peptide selected from the group consisting of SEQ ID Nos: 4, 5, 6, and 7.

Art Unit: 1644

Unity of invention may encompass a novel product, a process of making the product and a process of using product. In the instant case, the method of inhibiting platelet aggregation of claims 11 and 30 constitute the first recited use of the peptides. The method of claims 12-14 and 31-32 constitute second and third recited uses of an antibody and are not within the unity of the invention see 37 CFR 1.475(d).) The manufacturing method of claim 20 constitute the first recited process of making of peptide, however the manufacturing method depends from a host cells, vectors, and polynucleotides and thus is not within the unity of the invention. The products of Groups II and II and process of using the products are not within the unity of the invention.

The different composition of Groups I-III do not have a common core structure or function because there is no 1:1 correlation between DNA, peptide and antibodies. The products are a family of proteins not one particular protein (see PCT Rule 13.2 and example 17 of Annex B) in MPEP.

### *Species Election*

3. Irrespective of whichever group applicant may elect, applicant is further required under 35 US 121 (1) to elect a single disclosed species to which claims would be restricted if no generic claim is finally held to be allowable and (2) to list all claims readable thereon including those subsequently added.

- A) If anyone of Groups I, III, or IV is elected, applicant is required to a single specific peptide such as a) SEQ ID NO: 4, b) SEQ ID NO: 5, c) SEQ ID NO: 6 or d) SEQ ID NO:7. These are distinct species because their structures and modes of action are different which, in turn, address different therapeutic endpoints.
- B) If anyone of Groups II, V or VI is elected, applicant is required to a single specific antibody comprising an amino acid residues sequence such as a) SEQ ID NO: 8, b) SEQ ID NO: 25, c) SEQ ID NO: 26, d) SEQ ID NO: 27, e) SEQ ID NO: 28, f) SEQ ID NO: 29 or g) SEQ ID NO: 30 or SEQ ID NO: 31. Alternatively, Applicant can elect a specific antibody such as the one recited in claim 8 (e.g., RAD3). These are distinct species because their structures and modes of action are different which, in turn, address different therapeutic endpoints.
- C) If anyone of Groups IV-V is elected, applicant is required to a particular disorder of thrombus formation such as the one recited in claims 30-32 (e.g., deep vein thrombosis). These species are distinct because the pathological conditions differ in etiologies and therapeutic endpoints; thus each condition represents patentably distinct subject matter.

Art Unit: 1644

4. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

**Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined** even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected species**, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

5. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully

Art Unit: 1644

examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained.

Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maher Haddad whose telephone number is (571) 272-0845. The examiner can normally be reached Monday through Friday from 7:30 am to 4:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on (571) 272-0735. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 12, 2010

/Maher M. Haddad/  
Primary Patent Examiner  
Technology Center 1600